Annual Report 2001 of the

Environmental Finance Center Network

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2001 Annual Report

California State University, Hayward EFC

The EFC at California State University focuses on Small Businesses

he Environmental Finance Center at California State University, Hayward (EFC9) is a university-based Center working for greener communities through cleaner business, by advancing the environmental industry and promoting pollution prevention and source reduction. The mission of the EFC is four-pronged:

- 1. To help entrepreneurs develop and finance new and innovative environmental technologies,
- 2. To encourage small business to adopt source reduction and pollution prevention in the manufacturing processes,
- 3. To educate and encourage consumers to choose

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green business and green business products, and

4. To help federal, state and local governments establish the necessary tools to foster cleaner business.

To that end, working with both the private and public sectors, EFC9 pursues its mission through numerous tools including:



- Green business development
- Environmental business incubation
- Finance programs and directories
- Industry surveys and guides
- Technology transfer
- Charrettes, Conferences and Workshops
- Research publications and reports, and
- Hands-on assistance to small business.

Throughout the past year EFC9 has undertaken a number of new and ongoing initiatives working with both the private and public sectors. Those projects include:

- Electronic Waste Initiative Brominated Flame Retardants
- Arizona Green Business Program Facilitation

- US/Mexico Clean Air Investment Fund
- Prison Wet Cleaning Project Press Event
- Greening the Supply Chain Next Steps
- EPA/EFC9 Mini-Grants Program for Local Government
- Small Environmental Business Assistance Program
- Sustainable Urban Environments Initiative
- US/French Trade Initiative
- Environmental Technology & Venture Capital

ACCOMPLISHMENTS

Electronic Waste Initiative - Brominated Flame Retardants

In 2001 EFC9 and U.S. EPA Region 9 Pollution Prevention (P2) Team and the Solid Waste Section launched the Electronic Waste Initiative on Brominated Flame Retardants (BFRs). Brominated flame retardants are a class of brominated chemicals used in electronics to reduce flammability. Some of the brominated flame retardants have established adverse health effects and there is increasing concern about the levels of BFRs found in human and animal blood and tissue. In response, EFC9 and EPA Region 9 plan to hold a two-day, multi-stakeholder Roundtable in 2002 focused on brominated flame retardants and their alternatives in electronic products. The primary purpose of the meeting is to facilitate a wide and open exchange of information on the uses and potential environmental and human health impacts of, and alternatives to. brominated flame retardants in electronics.

In anticipation of the roundtable, EFC9, with assistance from EPA Region 9 and other interested agencies and organizations, has gathered, summarized, and overseen the preparation of short topical White Papers and fact sheets. White Paper/fact sheet topics already prepared and in progress include: use, range and characteristics of various types of BFRs, health

effects, ecological effects, regulatory status, alternatives to BFRs and impacts on recycling. EFC9 is coordinating all information gathering efforts from resources in the US, Europe and Japan, and hopes to gain consensus on this background information prior to the Roundtable in order to focus the discussion on future directions.

In addition, to allow for effective information exchange, EFC9 has established a BFR Information Clearinghouse in the form of a webpage (as part of our website, www.greenstart.org/efc9) that includes background information, key contacts and stakeholders, links, electronic documents and a bibliography of other documents and where they can be found.

Arizona Green Business Program Facilitation

EFC9 is assisting EPA Region 9 in its efforts to serve state and local governments that are searching for new approaches to improve their business assistance and Pollution Prevention (P2) programs. EFC9 has begun this program by helping the State of Arizona launch their Green Business Program. The EFC met with the State and other concerned agencies and organizations in Arizona three times in 2001 and will continue to do so throughout 2002. EFC9 also facilitated numerous conference calls and acted as an information resource and clearinghouse to help Arizona explore work already accomplished by other programs within the United States.

The Arizona Green Business Program will be launched in 2002. In 2001 the EFC accomplished the following major milestones:

- Establishing Program Tiers that describe how a business becomes a Certified Green Business,
- Defining the pilot program for Yuma City that will focus on the Auto Repair Industry, and

 Outlining a second pilot program that would focus on large quantity generators and large quantity users of toxic materials statewide.

Clean Air Investment Fund

Partnering with the New Mexico EFC, EFC9 is working with USEPA Region 6 to help develop and operate a Clean Air Investment Fund (similar to emissions trading) in the El Paso/Juarez/Las Cruces airshed. The project is a joint US/Mexico effort and will work to reduce emissions from industry on both sides of the border.

In 2001 the EFC convened several meetings in El Paso, Texas and Juarez, Mexico with public and private officials to discuss the specifics of the Clean Air Investment Fund, including discussions about the regulatory framework as well as concerns and expectations for the final product. While the overall structure of the Fund has been defined in the past year, several questions still remain including: who administers the fund, where will the fund reside, how does the cross border nature affect the fund, and how will the fund be initially financed.

In addition, to establish a Clean Air Investment Fund (CAIF), it is necessary to assess the position of businesses on both sides of the border and to listen to their thoughts and concerns. In 2002, the EFC team will contact businesses and set up a series of roundtable discussions to get specific feedback on topics related to the CAIF. The final report will also be completed in 2002.

Prison Wetcleaning Project Press Event

For several years, EFC9 has worked with the California Department of Corrections (CDC) to introduce Wet Cleaning as a greener vocational training

opportunity at State prisons. The EFC's efforts ended successfully on June 5, 2001 when EFC9 organized and held a press event to celebrate and publicize the establishment of the nation's first vocational professional wetcleaning program located in a state prisonat Soledad. Attendees listened to presentations about wetcleaning and toured the Program facility. The event received coverage in the local print and television media—the Salinas Californian and Television Channel 46 as well as columns in the State Department of Toxic Substance Control newsletter and the State Correctional News. In addition, it was reported in the Correctional Education Bulletin, August 2001.

Since beginning operation, the program has reduced perchloroethylene (perc) usage in Soledad prison by 65 percent. The program cleans 400-500 garments per day and has reduced dry cleaning by five loads a day, as wet cleaning volumes have increased.

Building on the credibility EFC9 gained from organizing this press event, EFC9 helped organize a vehicle service repair and pollution prevention at the CDC's June 14, 2001 Vocational and Technical Education Association meeting in Sacramento and another at a Corcoran State Prison in California's Central Valley.

Greening the Supply Chain

Manufacturers of complex products, such as automobiles, aircraft, ships, and appliances, depend on a broad network of suppliers for parts and assemblies. Many of the suppliers in these supply chains (or tiers) are small- and medium-size companies. By applying various approaches to manufacturing and purchasing decisions throughout a network of suppliers, it is possible for the entire "supply chain" to adopt green production methods and

so produce a more environmentally sound end-product.

EPA Region 9 is interested in determining where they might be able to direct their efforts to support the Green Supply Chain approach to production. As a result, EFC9 is preparing a report to evaluate existing and potential programs aimed at engaging large manufacturers in the Region to green their supply chain.

EPA/EFC9 Mini-Grants Program for Local Government

In partnership with USEPA, EFC9 is administering the 2001/2002 EPA-EFC9 P2 "Mini-Grants" Program for Local Government. The purpose of the EPA-EFC 9 "Mini Grants" program is to promote Pollution Prevention in local government. Grant recipients include:

- Marin County, CA, to develop the Novato Green Business Program.
- **City of Los Angeles** to develop a Mercury Medical Equipment Product Substitution Project.
- **Humboldt County, CA** to develop a Multi-agency Mercury Reduction Assistance Program.

Sustainable Urban Environments Initiative

On April 4, 2000, as part of the larger Sustainable Urban Environments Initiatives Program Grant, the Environmental Finance Center, Region 9 (EFC9), hosted a charrette to explore opportunities to attract environmentally favorable development to an urban core neighborhood. EFC9 continues to work with this community to help them identify opportunities for sustainable economic development. In 2001 we completed a report, *Bayview Incubator Feasibility Study and Proposal* in which we established the feasibility of an Environmental Small Business Incubator

for the community. We are currently pursuing funding options to make the proposed incubator a reality.

Small Environmental Business Assistance Program

In keeping with our original mandate to support and promote the environmental industry, EFC9 continues to work with small environmental business, one-on-one and through our funding database located on our website at www.greenstart.org/efc9.

US/French Trade Initiative

EFC9 continues to work with our sister organization ACET (newly named Advancing California's Emerging Technologies) and Savoie Technolac, a French technology innovation Centre, to help establish an environmental technology trade initiative between California and Frenchenvironmental entrepreneurs.

Environmental Technology & Venture Capital

As part of our efforts to provide services to the environmental industry, EFC9 has tracked venture capital investment in the industry since 1997. Our venture capital report has been updated to reflect 2001 trends.

NEW INITIATIVES FOR 2001

Green Business Website

As a result of our work with numerous Green Business Programs in the San Francisco Bay Area and our budding program in Arizona, EFC9 has identified a need for a centralized information source for Green Business Programs. As a result, EFC9 will develop a national Green Business Program Clearinghouse website for programs throughout the United States. The website will include valuable information for all programs from those just starting their planning process, to those that have been established for several years. Some of the information on the site will include but not be limited to:

- Finance resources.
- Industry checklists,
- Public and private program structures,
- Green business certification standards,
- Green business re-certification standards.
- Tiered systems of awards,
- Green business incentives,
- Forming public and private partnerships,
- Marketing and
- Contacts.

BFR National Roundtable

As discussed above, EFC9 will host and facilitate a national roundtable on Brominated Flame Retardants in 2002. This two-day roundtable will be the start of the initiative that will seek to answer such questions as:

- To what extent do BFRs in electronic products contribute to environmental and human health risk;
- What is known about the environmental and health effects of alternatives to BFRs in electronics;
- What are the regulatory and industry drivers on BFR use: and
- What are the opportunities for addressing those issues through product design and manufacturing?

Green Business Program Facilitation

In the past year EFC9 has become a conduit for information sharing between numerous Green Business Programs throughout Region 9. In addition we have helped facilitate meetings between several organizations and are continuing to work to advance innovative new ideas such as Environmentally Preferred Purchasing for services for some of the more advanced programs. As a result, EFC9 expects to take the lead in Green Business Program assistance and facilitation in Region 9 in the years to come. In 2002, programs we expect to work with include:

- City and County of San Francisco,
- Marin County,
- Alameda County,
- Contra Costa County,
- Sonoma County,
- Napa County,
- San Diego County,
- State of Hawaii, and
- State of Arizona.

EU Export Initiative Workshop

EFC9's sister organization, ACET, has established an EU Export Initiative Program. Partnered with the California Technology, Trade & Commerce Agency and the Bay Area World Trade Center, the EU Export Initiative is funded by the U.S. Department of Commerce Market Development Cooperator Program (MDCP). EFC9 will help ACET launch this new program by hosting a workshop on Exporting Environmental Technologies to the European Union. Overall, this new trade assistance program is designed assist California-based environmental and biomedical startup and small to medium-sized companies enter the European market.

Environmentally Preferred Purchasing for Services

Environmentally Preferable Purchasing (EPP) is a program that encourages and assists agencies in the purchasing of environmentally preferable products and services that have a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose. Certified Green Businesses in the Bay Area would like to see public and private entities with existing EPPs expand their programs by offering Certified Green Businesses a bidding preference over non-green business. This Service-based EPP, or SEPP, would provide additional incentives for new businesses to join the Green Business Program and it would help secure the place of those already in the program. In 2002 EFC9 will work with the Bay Area Green Business Program to help establish a SEPP pilot program in one or more of the participating counties.

EFC NETWORK COLLABORATIONS

In 2001 EFC9 collaborated with other Centers on the following projects.

Clean Air Investment Fund - EFC Region 6

(See description of program on page 3)

Public Management and Finance Program - EFC Region 2

EFC9 joined EFC2 in Minnowbrook, New York to help launch the Public Management and Finance Program (PMFP). EFC2 has developed a new Rural Communities Program that focuses on a variety of

areas, including the range of services accessible to communities, the gaps in the delivery of technical assistance, and the disconnect between public policies and the financial and management capacity communities have.

The PMFP offers hands-on technical assistance to rural communities through the development of teams of technical assistance providers. At the PMFP 2001 event, the teams were composed of representatives from accomplished nonprofit, academic, government, and private organizations that have established histories in providing technical assistance to rural communities. These organizations were brought together in rural upstate New York to provide information, technical assistance and support to small communities in need of assistance in spring 2001.

PRESENTATION, CONFERENCES & MEETINGS

US EPA SBIR Phase II

The director from the California EFC participated in the panel review for the 2001 Small Business Innovation Research (SBIR) Phase II assessment for EPA. Over 40 innovative environmental technologies were reviewed by the panel including efficient diesel filters, replacements for hexavalent chrome, detection devices for contaminated drinking water and infrared sensors to detect recyclable plastic. The Panel deliberated the merits of each proposal and recommended those most scientifically sound and commercially viable for Phase II funding.

US EPA Environmental Management Systems and Financial Performance

In fall 2001, EFC9 joined the Maine EFC (Region 1) in Washington DC as panelists at US EPA's

roundtable on Environmental Management Systems and Financial Performance. The Panel was assembled to answer the following questions:

- What is the Financial Services Industry doing, if anything, in considering EMS/certification as a factor in decision-making?
- If the industry is taking EMS/certification into account, in what ways is this occurring?
- If the Financial Services Industry is not considering EMS/certification at all or only tangentially, why not and what incentives or other factors would push them to take EMS into account?

California EPA Interdepartmental Workgroup on Flame Retardants in California

As part of our ongoing Brominated Flame Retardant (BFR) Initiative, EFC9 regularly participates in meetings sponsored by CalEPA. These meetings focus on the status of current scientific research and BFR regulations worldwide.

Western Regional Pollution Prevention Network

EFC9 facilitated a Green Business seminar at the annual Regional Pollution Prevention Network meeting held in the fall of 2001. EFC9 brought together Green Business leaders from throughout Region 9 to share information and learn about new and existing programs.

Bay Area Pollution Prevention Group (BAPPG)

EFC9 regularly attended meetings of the Bay Area Pollution Prevention Group (BAPPG). BAPPG is a voluntary association of all Bay Area municipal wastewater treatment plants that discharge into the San Francisco Bay.

Northern CA ISO 14000 Steering Group

EFC9 attended meetings of the Northern California ISO 14001 Steering Group. This group, sponsored by DTSC provided assistance to California businesses and municipal agencies to become ISO 14001 certified.

Bay Area Alliance for Sustainable Development

EFC9 regularly attended the Bay Area Alliance for Sustainable Development meetings. The Bay Area Alliance for Sustainable Development (Bay Area Alliance) is a multi-stakeholder coalition established in 1997 to develop and implement an action plan that will lead to a more sustainable region.

Northern California Recycling Coalition

EFC9 spoke at the Northern California Recycling Coalition's annual meeting on March 6, 2001 about wetcleaning. Over 100 people representing recyclers, landfills, businesses and non-profit organizations were in attendance. NCRA promotes waste reduction, reuse, recycling, salvaging and composting as environmentally sound methods to reduce the quantity of solid waste.

National Environmental Policy Commission

EFC9 was invited to attend the San Francisco Listening Session of the National Environmental Policy Commission and presented testimony supporting voluntary pollution prevention efforts on March 23, 2001. The Commission members included representatives of environmental justice communities, industry, tribal, state and local government,

environmental organizations, health professions and labor organizations. Congressional, state and local leaders attended the listening session.

Electronics Recycling Working Group

EFC9 attended meetings of the Electronics Recycling Working Group, a project sponsored by Materials of the Future Foundation. In addition, EFC9 spoke about BFRs at one of these meetings.

Bay Area Hazardous Waste Reduction Committee

EFC9 is a member of the Bay Area Hazardous Waste Reduction Committee and is a regular participant in committee meetings and events.

CalEPA Department of Toxic Substances Control (DTSC) AB1916 Meetings

As part of our efforts to promote pollution prevention, EFC9 continued to attend DTSC's AB1916 meetings. These meetings focused on Assembly Bill 1916, which enabled a committee of concerned organizations to provide guidance to CalEPA's pollution prevention efforts throughout the State.